

05/90
07/18 #6

OIPE

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/963,761B

DATE: 07/24/2002

TIME: 14:30:49

Input Set : A:\pto.vsk.txt

Output Set: N:\CRF3\07242002\I963761B.raw

3 <110> APPLICANT: Arazi, Tzahi
 4 Gal-On, Amit
 5 Shibolet, Yoel Moshe
 7 <120> TITLE OF INVENTION: VECTORS FOR EXPRESSING HETEROLOGOUS PEPTIDES AT THE AMINO-
 TERMINUS OF
 8 POTYVIRUS COAT PROTEIN, METHODS FOR USE THEREOF, PLANTS INFECTED WITH SAME AND
 9 METHODS OF VACCINATION USING SAME
 11 <130> FILE REFERENCE: 1686/4
 13 <140> CURRENT APPLICATION NUMBER: 09/963,761B
 14 <141> CURRENT FILING DATE: 2001-09-27
 16 <150> PRIOR APPLICATION NUMBER: US 60/253,136
 17 <151> PRIOR FILING DATE: 2000-11-28
 19 <160> NUMBER OF SEQ ID NOS: 33
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 837
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Zucchini yellow mosaic virus
 28 <400> SEQUENCE: 1
 29 tcaggcactc agccaaactgt ggcagatgct ggagctacaa agaaaagataa agaagatgac 60
 31 aaaggaaaaa acaaggacgt tacaggctcc ggctcagggtg agaaaaacagt agcagctgtc 120
 33 acgaaggaca aggatgtgaa tgctggttct catggaaaa ttgtgcccg tcttcgaag 180
 35 atcacaaaaga aaatgtcatt gccacgcgtg aaaggaaaatg tgataactcga tattgtatcat 240
 37 ttgctggaat ataaaaccgga tcaaatttgag ttatataaca cacgagcgtc tcatacagcag 300
 39 ttgcctctt ggttcaacca ggttaagacg gaatatgatt tgaacgagca acagatggga 360
 41 gttgtaatga atggttcat ggttgggtgc attgagaatg gcacttcacc cgacattaat 420
 43 ggagtgtggg ttatgtatgga cgaaaatgag caagttgagt atcccttggaa accaatagtt 480
 45 gaaaatgcaa agccaaacgt gcccggcaata atgcatttcatt tttcagatgc agcggaggca 540
 47 tataatagaga tgagaaatgc agaggcacca tacatgccga gttatggttt gtttgcggaaac 600
 49 ctacgggata ggagtttagc acgatatgct tttgatttct atgaagtcaa ttctaaaact 660
 51 cctgaaaagag cccgcgaagc tggcgcgcaatgaaaagcag cagcttttag caatgtttct 720
 53 tcaaggttgt ttggccttga tgaaaatgtt gcccacta gcaagacac tgaacggcac 780
 55 actgcacgtg atgttaatag aaacatgcac accttactag gtgtgaatac aatgcag 837
 58 <210> SEQ ID NO: 2
 59 <211> LENGTH: 279
 60 <212> TYPE: PRT
 61 <213> ORGANISM: Zucchini yellow mosaic virus
 63 <400> SEQUENCE: 2
 65 Ser Gly Thr Gln Pro Thr Val Ala Asp Ala Gly Ala Thr Lys Lys Asp
 66 1 5 10 15
 69 Lys Glu Asp Asp Lys Gly Lys Asn Lys Asp Val Thr Gly Ser Gly Ser
 70 20 25 30
 73 Gly Glu Lys Thr Val Ala Ala Val Thr Lys Asp Lys Asp Val Asn Ala
 74 35 40 45

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77 Gly Ser His Gly Lys Ile Val Pro Arg Leu Ser Lys Ile Thr Lys Lys
 78 50 55 60
 81 Met Ser Leu Pro Arg Val Lys Gly Asn Val Ile Leu Asp Ile Asp His
 82 65 70 75 80
 85 Leu Leu Glu Tyr Lys Pro Asp Gln Ile Glu Leu Tyr Asn Thr Arg Ala
 86 85 90 95
 89 Ser His Gln Gln Phe Ala Ser Trp Phe Asn Gln Val Lys Thr Glu Tyr
 90 100 105 110
 93 Asp Leu Asn Glu Gln Gln Met Gly Val Val Met Asn Gly Phe Met Val
 94 115 120 125
 97 Trp Cys Ile Glu Asn Gly Thr Ser Pro Asp Ile Asn Gly Val Trp Val
 98 130 135 140
 101 Met Met Asp Gly Asn Glu Gln Val Glu Tyr Pro Leu Lys Pro Ile Val
 102 145 150 155 160
 105 Glu Asn Ala Lys Pro Thr Leu Arg Gln Ile Met His His Phe Ser Asp
 106 165 170 175
 109 Ala Ala Glu Ala Tyr Ile Glu Met Arg Asn Ala Glu Ala Pro Tyr Met
 110 180 185 190
 113 Pro Arg Tyr Gly Leu Leu Arg Asn Leu Arg Asp Arg Ser Leu Ala Arg
 114 195 200 205
 117 Tyr Ala Phe Asp Phe Tyr Glu Val Asn Ser Lys Thr Pro Glu Arg Ala
 118 210 215 220
 121 Arg Glu Ala Val Ala Gln Met Lys Ala Ala Leu Ser Asn Val Ser
 122 225 230 235 240
 125 Ser Arg Leu Phe Gly Leu Asp Gly Asn Val Ala Thr Thr Ser Glu Asp
 126 245 250 255
 129 Thr Glu Arg His Thr Ala Arg Asp Val Asn Arg Asn Met His Thr Leu
 130 260 265 270
 133 Leu Gly Val Asn Thr Met Gln
 134 275
 137 <210> SEQ ID NO: 3
 138 <211> LENGTH: 20
 139 <212> TYPE: DNA
 140 <213> ORGANISM: Zucchini yellow mosaic virus
 142 <400> SEQUENCE: 3
 143 catttccttt cacgcgtggc 20
 146 <210> SEQ ID NO: 4
 147 <211> LENGTH: 21
 148 <212> TYPE: DNA
 C--> 149 <213> ORGANISM: Artificial
 151 <220> FEATURE:
 152 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-Histidine with a Serine at its
 153 N'
 155 <400> SEQUENCE: 4
 156 tcacaccatc accatcacca t 21
 159 <210> SEQ ID NO: 5
 160 <211> LENGTH: 7
 161 <212> TYPE: PRT
 C--> 162 <213> ORGANISM: Artificial

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Input Set : A:\pto.vsk.txt
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164 <220> FEATURE:
165 <223> OTHER INFORMATION: Hexa-Histidine (His) peptide fuse to serine (Ser) at its N'
167 <400> SEQUENCE: 5
169 Ser His His His His His
170 1 5
173 <210> SEQ ID NO: 6
174 <211> LENGTH: 53
175 <212> TYPE: DNA
C--> 176 <213> ORGANISM: Artificial
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-histidine fused to the N-terminus
180 us of Zucchini Yellow Mosaic Virus coat protein gene
182 <400> SEQUENCE: 6
183 cagctgcagt cacaccatca ccatcaccat tcaggcactc agccaaactgt ggc 53
186 <210> SEQ ID NO: 7
187 <211> LENGTH: 55
188 <212> TYPE: DNA
C--> 189 <213> ORGANISM: Artificial
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Nucleotide sequence encoding Hexa-histidine fused to the N-terminus
193 us of Zucchini Yellow Mosaic Virus coat protein gene of which the
194 N' terminal 8 amino acids were deleted
196 <400> SEQUENCE: 7
197 cagctgcagt cacaccatca ccatcaccat gatactggag ctacaaagaa agaag 55
200 <210> SEQ ID NO: 8
201 <211> LENGTH: 45
202 <212> TYPE: DNA
203 <213> ORGANISM: Homo sapiens
205 <400> SEQUENCE: 8
206 tcagcatcag agcagaagct catttcagag gaggatctcg gatcc 45
209 <210> SEQ ID NO: 9
210 <211> LENGTH: 15
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 9
216 Ser Ala Ser Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Gly Ser
217 1 5 10 15
220 <210> SEQ ID NO: 10
221 <211> LENGTH: 77
222 <212> TYPE: DNA
C--> 223 <213> ORGANISM: Artificial
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from Human
c-Myc
227 -tag fused to the N-terminus of Zucchini Yellow Mosaic Virus (AGI
228 I) coat protein gene
230 <400> SEQUENCE: 10
231 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcg atcctcaggc 60
233 actcagccaa ctgtggc 77
236 <210> SEQ ID NO: 11

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Input Set : A:\pto.vsk.txt
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237 <211> LENGTH: 82
 238 <212> TYPE: DNA
 C--> 239 <213> ORGANISM: Artificial
 241 <220> FEATURE:
 242 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a partial H
 243 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
 244 Virus (AGII) coat protein gene of which the N' terminal 8 amino a
 245 cids were deleted
 247 <400> SEQUENCE: 11
 248 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcg atccgatact 60
 250 ggagctacaa agaaaagataa ag 82
 253 <210> SEQ ID NO: 12
 254 <211> LENGTH: 81
 255 <212> TYPE: DNA
 C--> 256 <213> ORGANISM: Artificial
 258 <220> FEATURE:
 259 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a partial H
 260 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
 261 Virus (AGII) coat protein gene of which the N' terminal 13 amino
 262 acids were deleted
 264 <400> SEQUENCE: 12
 265 cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcg atccaagaaa 60
 267 gataaagaag atgacaaaagg g 81
 270 <210> SEQ ID NO: 13
 271 <211> LENGTH: 31
 272 <212> TYPE: DNA
 C--> 273 <213> ORGANISM: Artificial
 275 <220> FEATURE:
 276 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a partial H
 277 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
 278 Virus (AGII) coat protein gene of which the N' terminal 18 amino
 279 acids were deleted
 281 <400> SEQUENCE: 13
 282 cgcggatccg atgacaaaagg gaaaaacaag g 31
 285 <210> SEQ ID NO: 14
 286 <211> LENGTH: 30
 287 <212> TYPE: DNA
 C--> 288 <213> ORGANISM: Artificial
 290 <220> FEATURE:
 291 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a partial H
 292 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
 293 Virus (AGII) coat protein gene of which the N' terminal 23 amino
 294 acids were deleted
 296 <400> SEQUENCE: 14
 297 ctcggatcca acaaggatgt tacaggctcc 30
 300 <210> SEQ ID NO: 15
 301 <211> LENGTH: 27
 302 <212> TYPE: DNA
 C--> 303 <213> ORGANISM: Artificial

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Input Set : A:\pto.vsk.txt
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305 <220> FEATURE:
306 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
307 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
308 Virus (AGII) coat protein gene of which the N' terminal 28 amino
309 acids were deleted
311 <400> SEQUENCE: 15
312 cgcggatccg gctccggctc aagttag 27
315 <210> SEQ ID NO: 16
316 <211> LENGTH: 30
317 <212> TYPE: DNA
C--> 318 <213> ORGANISM: Artificial
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
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322 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
323 Virus (AGII) coat protein gene of which the N' terminal 33 amino
324 acids were deleted
326 <400> SEQUENCE: 16
327 cgcggatccg agaaaacagt ggcagctgtc 30
330 <210> SEQ ID NO: 17
331 <211> LENGTH: 28
332 <212> TYPE: DNA
C--> 333 <213> ORGANISM: Artificial
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
337 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
338 Virus (AGII) coat protein gene of which the N' terminal 38 amino
339 acids were deleted
341 <400> SEQUENCE: 17
342 cgcggatccg ctgtcacgaa ggacaagg 28
345 <210> SEQ ID NO: 18
346 <211> LENGTH: 33
347 <212> TYPE: DNA
C--> 348 <213> ORGANISM: Artificial
350 <220> FEATURE:
351 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
352 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
353 Virus (AGII) coat protein gene of which the N' terminal 43 amino
354 acids were deleted
356 <400> SEQUENCE: 18
357 cgcggatcca aggatgtaaa tgctggttct cat 33
360 <210> SEQ ID NO: 19
361 <211> LENGTH: 30
362 <212> TYPE: DNA
C--> 363 <213> ORGANISM: Artificial
365 <220> FEATURE:
366 <223> OTHER INFORMATION: Nucleotide sequence encoding the peptide derived from a
partial H
367 uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic
368 Virus (AGII) coat protein gene of which the N' terminal 48 amino

369

acids were deleted

VERIFICATION SUMMARY
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DATE: 07/24/2002
TIME: 14:30:50

Input Set : A:\pto.vsk.txt
Output Set: N:\CRF3\07242002\I963761B.raw

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L:176 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:189 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:223 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:239 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:256 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:273 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:288 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:303 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:318 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:333 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:348 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:363 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:402 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:419 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
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